

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/051649 A1

(51) International Patent Classification⁷: **B32B 5/26**,
15/08, F41H 5/04

(74) Agents: LEEMING, John, Gerard et al.; J.A. Kemp &
Co., 14 South Square, Gray's Inn, London WC1R 5JJ (GB).

(21) International Application Number:
PCT/GB2004/004625

(22) International Filing Date:
1 November 2004 (01.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0326609.5 14 November 2003 (14.11.2003) GB

(71) Applicant (for all designated States except US): INTEL-
LIGENT ENGINEERING (BAHAMAS) LIMITED
[BS/BS]; Bahamas International Trust Building, Bank
Lane, P.O. Box N8188, Nassau (BS).

(71) Applicant (for MW only): LEEMING, John, Gerard
[GB/GB]; 14 South Square, Gray's Inn, London WC1R
5JJ (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): KENNEDY, Stephen,
John [CA/CA]; 42 Hampton Avenue, Ottawa, Ontario K17
0N2 (CA).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

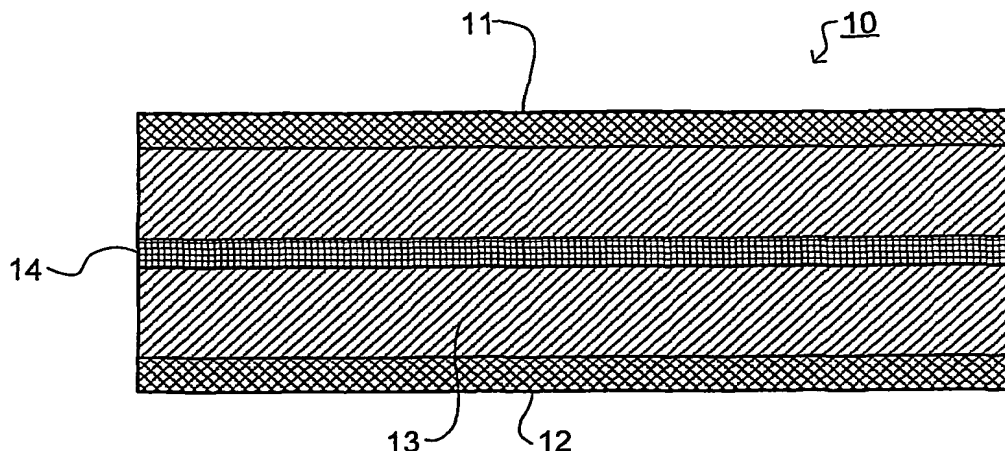
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: IMPROVED STRUCTURAL SANDWICH PLATE MEMBERS



(57) Abstract: A structural sandwich plate member is provided with at least one interlayer to improve ballistics and/or blast resistance. The interlayer may be a solid or perforated metal plate, a metal mesh, hard ceramic or high tensile strength fabric. The interlayer may be corrugated.